

3.8 ONSHORE GEOLOGY, WATER RESOURCES, AND BIOLOGICAL RESOURCES

The proposed Program Alternatives could result in the onshore disposal of dredged shell mound materials and caisson debris at the POLB, an approved upland recycling facility, or one or more permitted upland landfills. The POLB may accept dredged materials for beneficial use as construction fill as part of its overall development strategy and program for handling its own dredged sediments. Alternatively, a recycling facility in the Taft/Buttonwillow area of southern Kern County has been identified as a potential disposal site, and other recycling facilities in the southern San Joaquin Valley are under consideration. Finally, dredged material and caisson debris could be deposited in one or more permitted upland landfills. Recycling and landfill facilities capable of accepting dredged materials and caisson debris would do so in accordance with their operating permit conditions, which would preclude any associated impacts on geological, water resources, and biological resources. Accordingly, this Section focuses on onshore geological, water, and biological resources at the POLB.

Offshore geological, water, and biological resources (including birds) are addressed in Sections 3.2, 3.3, 3.4, and 3.5.

3.8.1 Environmental Setting

3.8.1.1 Geology

The POLB is located in the southwestern portion of the Los Angeles Basin, which consists of a broad coastal plain that slopes gradually seaward (southwest and south) to the Pacific Ocean. The POLB harbor is located in southern-central San Pedro Bay, a natural embayment formed by a westerly protrusion of the coastline and the Palos Verdes Hills, the dominant onshore topographic feature. Southern California is a seismically active area and the regional pattern of faulting is characterized by a consistent pattern of northwest-trending faults that delineate the active boundary between the Pacific (oceanic) and North American (continental) plates (Ziony 1985). Approximately 17 potentially active faults are identified within a 60-mile radius of the POLB. Of these, the four fault zones with the greatest potential to affect the POLB are the Palos Verdes fault zone, the Newport-Inglewood fault, the Whittier fault, and the San Andreas fault. The Palos Verdes fault is located about 2.4 miles west of the POLB. The Maximum Credible Earthquake (MCE) for the Palos Verdes fault is 7.0. The Newport-Inglewood fault zone is an active fault located about 3.6 miles east-northeast of the site. The MCE for the Newport-Inglewood fault is 7.0. The Whittier fault zone is an active fault located about 19.2 miles northeast of the site. The MCE for this fault is reported to be 7.5. The San Andreas fault zone is an active fault located about 50.4 miles northeast of the site. The MCE for this fault zone is anticipated to be 7.8.

The POLB as a whole has been identified as having a high potential for soil liquefaction, which is a quicksand-like condition in which a total loss of foundation support is caused by a shock, typically an earthquake. Tsunamis are potentially damaging sea waves with very long wave periods generated by earthquakes, submarine volcanic explosions, or

undersea landslides. Tsunami damage is typically restricted to low-lying coastal areas. There is a potential for damage at the POLB if a tsunami occurred. Seiches are earthquake-induced waves that occur in a confined body of water, such as a lake, reservoir, or bay. Proximity to the harbor's channels and basins, combined with the regional seismic activity, could result in damage from a seiche (POLB 1999a). Portions of Long Beach Harbor overlie the Wilmington Oil Field, a major producer of oil and gas (USACE and LAHD 1992). Subsidence, or the widespread sinking of land, has historically occurred in the Long Beach Harbor area as a result of oil extraction.

3.8.1.2 Water Resources

Water resources encompass surface water (standing or flowing), groundwater, and water quality. The POLB comprises 1,700 acres of land and water area within and surrounding Long Beach Harbor. Freshwater features within or adjacent to the POLB include the Los Angeles River and Dominguez Channel. The Los Angeles River drains an inland area of 832 square miles and discharges to San Pedro Bay at the eastern edge of the POLB. The 14-mile Dominguez Channel, which marks the western edge of the POLB, originates inland near the Century (105) Freeway and drains 80 square miles within several heavily industrialized South Bay cities. It discharges to the East Basin in Los Angeles Harbor. Both drainages are channelized along their lower reaches in the vicinity of the POLB. The mouths of the Los Angeles River and Dominguez Channel are tidally influenced and characterized by a layer of marine water beneath surface freshwater.

Other freshwater influxes to the harbor include direct precipitation and surface and storm drain flows contributed by surrounding developed areas. Because of the intensity of POLB development, little precipitation is absorbed on land. All POLB lands drain, directly or indirectly, into San Pedro Bay.

Following storm events, the quality of the surface water may be poor due to loading with oils, grease, hydrocarbons, and particulate matter associated with the operation of industrial land uses and urban runoff from roadways.

Elevations within the POLB vary from sea level up to 15 feet above sea level.

3.8.1.3 Biological Resources

The POLB is generally a highly industrialized area although, because of its shoreline location, it supports both natural and developed features. Formerly marshland or open water, much of the POLB has been filled and developed with marine terminals and industrial uses and currently supports little or no upland vegetation. POLB recreational and open space areas, predominantly located around Queensway Bay, support lawns and other ornamental landscape plantings. Those upland areas not developed, paved or recently cleared are dominated by weedy and/or salt-tolerant vegetation, such as saltgrass (*Distichlis spicata*), and scattered ornamental plantings such as street trees.

Wildlife use of weedy and ornamentally landscaped areas within the POLB is typically limited to species associated with urban areas and tolerant of disturbance, including

feral cats, rats and mice, and birds such as gulls (*Larus* spp.), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), rock dove (*Columba livia*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*) European starling (*Sturnus vulgaris*), Brewer's blackbird (*Euphagus cyanocephalus*), and northern mockingbird (*Mimus polyglottos*) (POLB 1999a).

3.8.2 Regulatory Setting

3.8.2.1 Geology

Alquist-Priolo Earthquake Zoning Act (APEFZA)

The Alquist-Priolo Earthquake Fault Zoning Act (APEFZA) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This state law was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. Surface rupture is the most easily avoided seismic hazard.

The main purpose of the APEFZA is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The APEFZA only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides.

The APEFZA requires the State Geologist to establish regulatory zones, known as Earthquake Fault Zones, around the surface trace of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new construction or renovation of existing structures. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Before a project can be permitted, cities and counties must require a geological investigation to demonstrate that proposed buildings would not be constructed across active faults. Setbacks of 50 feet from active fault strands are generally required for construction of habitable structures (California Geological Survey 2002).

Additionally, as a result of the Northridge earthquake in 1994, California Building Code requirements were updated to address deficiencies in existing codes to minimize future damage to life and structures as a result of earthquakes.

3.8.2.2 Water Resources

Water Pollution Control Act and Amendments (Clean Water Act)

Section 401 of the Federal Clean Water Act of 1972 (CWA) sets national goals and policies to eliminate discharge of water pollutants into navigable waters and to achieve water quality levels that protect fish, shellfish, and wildlife while providing for recreational opportunities in and on the water whenever possible. The CWA requires

1 states to designate appropriate water uses to be protected and mandates that states set
2 water quality standards based on these uses. States must review and revise these
3 water quality standards every 3 years. The EPA is responsible for promulgating
4 regulations under the Clean Water Act, including the review and approval of state water
5 quality standards. The CWA is administered and enforced by the State Water Regional
6 Control Board (SWRCB).

7 A 1997 EPA review of California water quality standards found a lack of criteria for
8 several toxic pollutants. The EPA, ruling that California was not meeting the provisions
9 of the Clean Water Act, established criteria and a compliance schedule for 80 pollutants
10 (USEPA 2000b). In an attempt to resolve these issues, the SWRCB adopted a "Policy
11 for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and
12 Estuaries in California" on April 26, 2000 (SWRCB 2000).

13 *National Pollutant Discharge Elimination System*

14 The National Pollutant Discharge Elimination System (NPDES) permit program was
15 established by the Clean Water Act and regulates point-source surface discharges to
16 waters of the United States (33 USC section 1342). In California, one of nine regional
17 water quality control boards (RWQCBs) administers the NPDES permit program for
18 purposes of satisfying the water quality criteria of both the Clean Water Act and Porter-
19 Cologne Act (see heading below). Discharge of pollutants to waters of the United
20 States from storm water is prohibited except in compliance with a NPDES permit.
21 Additionally, the responsible RWQCB issues Waste Discharge Requirements (WDRs)
22 for the discharge of waste to land determined to be outside waters of the United States.
23 Both construction and operational activities are regulated under the NPDES program
24 and by the WDRs.

25 The POLB operates under a statewide Industrial Activities Storm Water General Permit.
26 To comply with permit requirements, the POLB implements a Master Storm Water
27 Program that centralizes regulation of storm water runoff port-wide and ensures
28 compliance with General Permit conditions. As part of this program, the POLB
29 coordinates with the city of Long Beach to implement the City's comprehensive Storm
30 Water Management Program, which contains elements, practices and activities aimed
31 at reducing or eliminating pollutants in storm to the maximum extent practicable. BMPs,
32 or Best Management Practices, include accepted programs, technology, facility siting
33 criteria, operational methods, or engineered systems that prevent, control, remove or
34 reduce pollution. The POLB enforces BMPs for industrial facilities based on guidance
35 provided by the California Storm Water BMP Handbook.

36 *Porter-Cologne Water Quality Act of 1969*

37 The Porter-Cologne Water Quality Act is California's primary water quality control
38 statute. It establishes the State Water Resources Control Board (SWRCB), gives it
39 final authority over state water quality, and establishes nine RWQCBs to oversee day-
40 to-day regional and local water quality issues. The regional boards prepare water
41 quality plans (called basin plans) for their region. Basin plans identify beneficial uses of

1 water that should be protected, establish water quality objectives (limits or levels of
2 water constituents based on both state and federal laws), and define an implementation
3 program to meet water quality objectives. The upland areas potentially affected by
4 implementation of the proposed Program Alternatives are all located within the
5 boundaries of the Los Angeles RWQCB (Region 4).

6 **3.8.2.3 Biological Resources**

7 *Endangered Species Act (1973)*

8 The federal Endangered Species Act (1973), as amended, 16 USC section 1531 et
9 seq., protects threatened and endangered species, as well as species proposed for
10 listing and critical habitat, as listed by the U.S. Fish and Wildlife Service (USFWS), from
11 unauthorized take, and directs federal agencies to ensure that their actions do not
12 jeopardize the continued existence of such species. Section 7 of the Act defines federal
13 agency responsibilities for consultation with the USFWS. The Act requires preparation
14 of a Biological Assessment (BA) to address the effects on listed and proposed species
15 of a project requiring an Environmental Impact Statement (EIS). In a Biological Opinion
16 issued as a result of formal consultation, the USFWS may authorize incidental take of
17 listed species under Section 9 of the Act. Under Section 10 of the Act, the USFWS may
18 issue permits, with conditions, that authorize the take (harm or harassment) of a listed
19 species.

20 *Federal Migratory Bird Treaty Act (1918), as amended (16 USC section 703-712) and* 21 *Executive Order 13186 (2001)*

22 This Act provides for the protection of migratory birds by making it illegal to possess,
23 take, or kill any migratory bird species, unless specifically authorized by a regulation
24 implemented by the Secretary of the Interior, such as designated seasonal hunting.
25 The Executive Order requires federal agencies to obtain permits from the USFWS for
26 the “taking” of any migratory bird species.

27 *Executive Order 13186*

28 This Executive Order outlines the responsibilities of federal agencies to protect
29 migratory birds, in furtherance of the Migratory Bird Treaty Act (MBTA), the Bald and
30 Golden Eagle Protection Acts, the Fish and Wildlife Coordination Act, Endangered
31 Species Act (ESA), and the National Environmental Policy Act (NEPA).

32 *California Endangered Species Act of 1984 (Fish and Game Code section 2050 et seq.)*

33 These sections of the California Endangered Species Act provide for the protection of
34 rare, threatened, and endangered plants and animals recognized by the California
35 Department of Fish and Game (CDFG), and prohibit the taking of such species without
36 authorization by the CDFG. State agencies are required to consult with the CDFG on
37 actions that may affect listed or candidate species. CDFG Species of Special Concern
38 should also be considered because they may now or in the future be eligible for listing.

1 *California Fully Protected Birds, Mammals, Reptiles/Amphibians and Fish (Fish and*
2 *Game Code section 3511, 4700, 5050 and 5515)*

3 These sections of the Fish and Game Code prohibit the take or possession of any fully
4 protected bird, mammal, reptile/amphibian, or fish.

5 **3.8.3 Significance Criteria**

6 The significance criteria listed below are based on Appendix G of the State CEQA
7 Guidelines.

8 **3.8.3.1 Geology**

9 A proposed Program Alternative would have a significant impact on onshore geological
10 resources if it would:

- 11 • Expose people or structures to potential substantial adverse effects, including the
12 risk of loss, injury, or death involving:
 - 13 – Rupture of a known earthquake fault, as delineated on the most recent
 - 14 Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for
 - 15 the area or based on other substantial evidence of a known fault;
 - 16 – Strong seismic ground shaking;
 - 17 – Seismic-related ground failure, including liquefaction;
 - 18 – Landslides; or
- 19 • Result in substantial soil erosion or the loss of topsoil;
- 20 • Involve construction located on a geological unit or soil that is unstable, or that
21 would become unstable as a result of the project, and potentially result in an on-
22 or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- 23 • Be located on expansive soil, as defined in the Uniform Building Code, creating
24 substantial risks to life or property;
- 25 • Result in the substantial loss of availability of a known mineral resource that
26 would be of value to the region and the residents of the state; or
- 27 • Result in the substantial loss of availability of a locally important mineral resource
28 recovery site delineated on a local general plan, specific plan, or other land use
29 plan.

30 **3.8.3.2 Water Resources**

31 A proposed Program Alternative would have a significant impact on water resources if it
32 would:

- Violate (or cause violation of) any water quality standard or waste discharge requirement;
- Substantially deplete groundwater supplies or interfere substantially with naturally occurring groundwater recharge;
- Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Cause inundation by seiche, tsunami, or mudflow.

3.8.3.3 Biological Resources

A proposed Program Alternative would have a significant impact on biological resources if it would:

- Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or the USFWS;
- Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or the USFWS;
- Adversely impact federally protected wetlands (including marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with the established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved, local, regional, or state habitat conservation plan.

3.8.4 Impacts and Mitigation Measures

3.8.4.1 Program Alternative 1 (PA1): Shell Mounds and Caissons Removal and Disposal

Impact – Geology

Dredged material accepted by the POLB would be used as construction fill for an as-yet undetermined project. Construction projects at the POLB are required to undergo environmental review. Any potential construction impacts on onshore geological resources resulting from the placement of dredged material as fill would be evaluated at that time, and mitigation measures would be identified as needed. No other actions that could affect onshore geological resources, such as erosion or loss of a mineral resource, would occur as a result of disposal or offloading of dredged shell mounds material and debris at the POLB. PA1 would have no impact on geology at either a landfill or recycling facility as use of either of those facilities would be a permitted, ongoing operation which would be accepting material regardless of the proposed project. Accordingly, PA1 is not expected to have any impact on onshore geological resources.

MITIGATION MEASURES

None proposed.

Impact – Water Resources

Dredged material would be accepted by the POLB only if it met the applicable standards for chemical and structural composition. Upon acceptance, it would be used as construction fill for an as-yet undetermined project. The dredged material would be dewatered at sea prior to placement at the POLB. Disposal would take place in accordance with the POLB's Master Storm Water Program and would therefore be in compliance with its statewide Industrial Activities Storm Water General Permit, including applicable BMPs.

Assuming compliance with the POLB's Master Storm Water Program, placement of dredged material at the POLB would not violate (or cause violation of) applicable water quality standards or waste discharge requirements; deplete groundwater supplies or interfere with recharge; cause erosion, siltation, or flooding; or otherwise substantially

degrade water quality. Placement at the POLB would not cause inundation by seiche, tsunami, or mudflow. No habitable or other structures are proposed as part of PA1. Future construction projects at the POLB are required to undergo environmental review; any potential impacts on onshore water resources from such construction would be evaluated at that time, and mitigation measures would be identified as needed. Accordingly, PA1 would result in less than significant impacts on onshore water resources at the POLB.

Offloading and transferal of dredged material and debris from barges to trucks at the POLB, for transport to and disposal at an approved recycling facility or permitted landfill would also be conducted in accordance with the POLB's Master Storm Water Program and would, therefore, result in less than significant impacts on onshore water resources at the POLB. Acceptance by, and disposal at, a recycling center or landfill would be required to occur in compliance with applicable NPDES permit or WDRs. Accordingly, impacts to water resources would be less than significant.

MITIGATION MEASURES

None proposed.

Impact – Biological Resources

The upland areas of the POLB do not contain sensitive habitats, sensitive natural communities, or federally protected wetlands, nor are they used as migratory wildlife corridors or native wildlife nursery sites. As discussed in Chapter 5, it is expected that PA1 would not conflict with any local policies or ordinances protecting biological resources. No HCPs, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans have been adopted in the POLB area. Impacts on onshore biological resources would be less than significant.

Offloading and transferal of dredged material and debris from barges to trucks at the POLB, for transport to and disposal at a permitted upland landfill or recycling facility, would similarly result in less than significant impacts on biological resources, as existing POLB facilities for such activities would be used and would not be expected to support sensitive biological resources. Impacts on onshore biological resources would be less than significant.

MITIGATION MEASURES

None proposed.

3.8.4.2 Program Alternative 2 (PA2): Leveling and Spreading of Shell Mounds with Caissons Removal and Disposal

Impact – Geology

In-place (i.e., offshore) leveling and spreading of the shell mounds, which includes demolition of the Hazel caissons, would generate relatively small volumes of concrete and metal caisson debris that would be offloaded daily at the POLB and hauled to one

3.8 Onshore Resources

1 or more permitted landfills or a recycling facility. As with disposal of shell mound
2 materials and caisson debris proposed under PA1, PA2 would have no impact on
3 onshore geological resources.

4 MITIGATION MEASURES

5 || None proposed.

6 *Impact – Water Resources*

7 The small volume of caisson debris generated under PA2 would be dewatered at sea,
8 offloaded at the POLB and disposed of in one or more permitted landfills or an approved
9 recycling facility, as is proposed under PA1. This Program Alternative would likewise be
10 carried out in compliance with the POLB's Master Storm Water Program, and, therefore,
11 would result in less than significant impacts on onshore water resources.

12 MITIGATION MEASURES

13 || None proposed.

14 *Impact – Biological Resources*

15 The relatively small volume of caisson debris generated under PA2 would be disposed
16 of in one or more permitted landfills or taken to an approved recycling facility, as is
17 proposed under PA1, and would similarly result in less than significant impacts on
18 onshore biological resources.

19 MITIGATION MEASURES

20 || None proposed.

21 **3.8.4.3 Program Alternative 3 (PA3): Capping**

22 *Impact – Geology, Water Resources, and Biological Resources*

23 In-place capping of the shell mounds would likely be accomplished using clean
24 sediment dredged by the POLB and Port of Los Angeles and transported by barge to
25 the shell mound sites. The cap material would thus originate and be deposited offshore,
26 and would result in no impacts on onshore geological, water, or biological resources.

27 MITIGATION MEASURES

28 || None proposed.

3.8.4.4 Program Alternative 4 (PA4): Artificial Reefs at all Four Shell Mounds*Impact – Geology, Water Resources, and Biological Resources*

In-place modification of the shell mounds as artificial reefs would require barge transport of approximately 10,000 1-ton to 1.5-ton rocks directly to the shell mound sites from an existing, operational quarry on Santa Catalina Island. This quarry is an approved operation that would be providing rock to other users regardless of the proposed project, so none of the impacts at the quarry would be attributable to the project. The other activities associated with in-place modification of the shell mounds as artificial reefs would occur entirely offshore. Reef creation would have no impact on onshore geological, water, or biological resources.

MITIGATION MEASURES

None proposed.

3.8.4.5 Program Alternative 5 (PA5): Artificial Reef at Hazel after Removing (5a) or Spreading (5b) Shell Mounds*Program Alternative 5a (PA5a): Artificial Reef at Hazel Site plus Removal and Disposal of Shell Mounds**Impact – Geology, Water Resources, and Biological Resources*

PA5a could result in the same onshore impacts identified for the shell mound removal/disposal component of PA1 and, additionally, impacts similar to those identified for the (relatively larger) artificial reef component of PA4. As noted in Section 3.8.4.4, none of the impacts at the quarry would be attributable to the project. PA1 was determined to have no impact on onshore geology and less than significant impacts on onshore water and biological resources. PA4 would occur entirely offshore and was determined to have no impact on onshore geological, water, or biological resources. PA5a is, therefore, expected to result in less than significant impacts on geology, associated with onshore disposal of shell mound materials, and less than significant impacts on onshore water and biological resources.

MITIGATION MEASURES

None proposed.

*Program Alternative 5b (PA5b): Artificial Reef at Hazel Site plus Leveling and Spreading Shell Mounds**Impact – Geology, Water Resources, and Biological Resources*

PA5b would result in the same impacts already identified for the shell mound leveling/spreading component of PA2 and, additionally, the same impacts already identified for the (relatively larger) artificial reef component of PA4. As noted in Section

3.8.4.4, none of the impacts at the quarry would be attributable to the project. The shell mound/spreading component of PA2 would generate a relatively small volume of rubble to be disposed of in an approved recycling facility or one or more permitted landfills, and was determined to result in no onshore geology impacts and less than significant impacts on onshore water and biological resources. PA4 would occur entirely offshore and was determined to have no impact on onshore geological, water, or biological resources. PA5b would, therefore, have no impact on onshore geological resources and less than significant impacts on onshore water and biological resources.

MITIGATION MEASURES

None proposed.

3.8.4.6 Program Alternative 6 (PA6): Offsite Mitigation

Impact – Geology, Water Resources, and Biological Resources

Under PA6, proposed mitigation of shell mound impacts would be accomplished through off-site habitat enhancement (e.g., at the Carpinteria Salt Marsh). The impacts and applicable mitigation measures are described in the Final EIR for the Carpinteria Salt Marsh Enhancement Plan (SBCFCWCD 2003, SCH 2003021016). Impacts were found to be mitigable to less than significant.

MITIGATION MEASURES

None proposed.

3.8.4.7 No Project Alternative

Impact – Geology, Water Resources, and Biological Resources

The No Project Alternative would have no impact on onshore geological, water, or biological resources.

MITIGATION MEASURES

None proposed.